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10/735,224 12/15/2003 Scott Allan Woodford 076574.00007 3899

42640 7590 05/21/2007  
DILLON & YUDELL LLP  
8911 NORTH CAPITAL OF TEXAS HWY  
SUITE 2110  
AUSTIN, TX 78759

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| EXAMINER |
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NGUYEN, TU X

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| ART UNIT | PAPER NUMBER |
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2618

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05/21/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/735,224 | <b>Applicant(s)</b><br>WOODFORD, SCOTT ALLAN |  |
|                              | <b>Examiner</b><br>Tu X. Nguyen      | <b>Art Unit</b><br>2618                      |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-18 is/are rejected.
- 7) ☒ Claim(s) 7 and 19 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6 and 8-18, are rejected under 35 U.S.C. 102(e) as being anticipated by Richards et al. (US Patent 7,207,054).

Regarding claim 1, Smith et al. disclose a low-noise block (LNB) control device capable of controlling modulation of an alternating waveform on a direct current (DC) voltage from a DC power supply to an LNB amplifier, said LNB control device comprising:

an LNB signalling module for providing a switch control signal and a modulating waveform (see col.5 lines 9-40); and

a switch circuit for selectively sending said modulating waveform (see col.5 lines 34-37) to a summing circuit external to said LNB control device according to said switch control signal, wherein said summing circuit adds said modulating waveform to said DC voltage (see col.6 lines 50-52).

Regarding claim 2, Smith et al. disclose said LNB control device further includes a power supply control module for receiving a power supply feedback signal from said DC power

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supply (see col.2 lines 35-38), and for sending a control signal to said DC power supply in response to said received power supply feedback signal (see col.2 lines 36-46).

Regarding claims 3 and 16, Smith et al. disclose said LNB control device further includes a high impedance resistor (see fig.4, element 132).

Regarding claims 4 and 17, Smith et al. disclose said LNB control device further includes a modulating voltage source and an offset voltage source (see col.6 lines 28-38).

Regarding claims 5 and 15, Smith et al. disclose said switch circuit includes at least one transistor (see fig.3, element 80).

Regarding claims 6 and 18, Smith et al. disclose said summing circuit includes a resistor, a capacitor and a transistor (see fig.3, elements 132, 90, 80).

Regarding claim 8, Smith et al. disclose said LNB control device is further coupled to a filter (see col.6 lines 60-61).

Regarding claims 9 and 12, Smith et al. disclose filter includes an inductor and resistor (see fig.3, elements 84, 132).

Regarding claims 10 and 13, Smith et al. disclose said filter includes a capacitor (see fig.3, element 90).

Regarding claim 11, Smith et al. disclose a satellite receiver comprising:

a DC power supply for providing a DC signal (see col.4 lines 1-5);

a filter circuit, coupled to said DC power supply, for filtering said DC signal (see col.6 lines 60-61);

a low-noise block (LNB) control device, coupled to said DC power supply, for providing a power supply control signal to and receiving a power supply feedback signal from said DC power supply (see fig.3), and

for generating a modulating signal; and a summing circuit, coupled to said LNB control device, for adding said modulating signal to said DC signal (see col.8 lines 41-55).

Regarding claim 14, Smith et al. disclose said LNB control device further includes a power supply control module for receiving said power supply feedback signal from said DC power supply (see col.8 lines 41-55), and for sending said power supply control signal to said DC power supply in response to said received power supply feedback signal (see col.8 lines 41-55); an LNB signalling module for providing a switch control signal and said modulating waveform (see col.5 lines 29-40); and a switch circuit for selectively sending said modulating waveform to said summing circuit according to said switch control signal (see 4 lines 16-33).

#### ***Allowable Subject Matter***

Claims 7 and 19, objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

Regarding dependent claims 7 and 19, the prior art fails to teach "said transistor is a Darlington NPN transistor".

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Nguyen whose telephone number is 571-272-7883.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to be 'Tu Nguyen', with a long horizontal flourish extending to the right.

April 30, 2007